

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

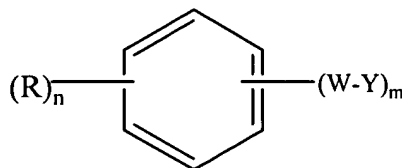
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Claim 1 (previously presented): A method for treating a disease or condition modulated by protein expression in a mammal suffering from, susceptible to, or recovering from the disease or condition, the method comprising administering to the mammal a therapeutically effective amount of at least one carbocyclic aryl compound comprising an unsaturated carbon chain and having spaced from the aryl ring a substituent of carboxy acid, ester, sulfonic acid, nitro, cyano or haloalkyl; or a pharmaceutically acceptable salt thereof, wherein the disease or condition afflicts or is suspected of afflicting the nervous, hepatic, or respiratory system.

Claim 2 (original): The method of claim 1 wherein the substituent is spaced from the carbocyclic aryl ring by an unsaturated carbon chain.

Claim 3 (original): The method of claim 1 wherein the substituent is spaced from the carbocyclic aryl ring by a C₂₋₆alkenylene chain.

Claim 4 (original): The method of claim 1 wherein the substituent is carboxy.

Claim 5 (previously presented): The method of claim 1 wherein the compound is of the following Formula I:



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wherein each W is independently optionally substituted alkylene; optionally substituted alkenylene; optionally substituted alkynylene; optionally substituted heteroalkylene; optionally substituted heteroalkenylene; or optionally substituted heteroalkynynylene and further wherein W comprises an unsaturated straight carbon chain;

each Y is independently a carboxy acid, ester, sulfonic acid, nitro, cyano or haloalkyl;

each R is independently halogen, cyano, nitro, optionally substituted alkyl; optionally substituted alkenyl; optionally substituted alkynyl; optionally substituted alkoxy; optionally substituted alkylthio; optionally substituted alkylsulfinyl; optionally substituted alkylsulfonyl; optionally substituted carbocyclic aryl; optionally substituted aralkyl;

m is an integer of from 1 to 6; n is an integer of from 0 to 5; and pharmaceutically acceptable salts thereof, with the exclusion of 4-phenylbutyric acid.

Claim 6 (original): The method of claim 5, wherein the compound comprises a straight carbon chain of about four carbon atoms.

Claim 7 (original): The method of claim 6, wherein the compound comprises a carbon-carbon double bond in the second ($\Delta 2$) or third ($\Delta 3$) position of the chain.

Claim 8 (previously presented): The method of claim 5, wherein the compound further comprises a phenyl ring in the fourth position of the chain.

Claim 9 (original): The method of claim 8, wherein the compound is a cis or trans stereoisomer.

Claim 10 (original): The method of claim 9, wherein the compound is 4-phenyl- $\Delta 3$ -transbutenoic acid; or a pharmaceutically acceptable salt thereof.

Claim 11 (canceled)

Claim 12 (original): The method of claim 11, wherein the respiratory system disease or condition is associated with abnormal lung function.

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Claim 13 (withdrawn): The method of claim 12, wherein the abnormal lung function is associated with a incorrect surfactant protein expression.

Claim 14 (withdrawn): The method of claim 13, wherein the surfactant protein is surfactant protein C.

Claim 15 (original): The method of claim 12, wherein the abnormal lung function is associated with incorrect protein expression of a transmembrane protein.

Claim 16 (original): The method of claim 15, wherein the respiratory disease is cystic fibrosis (CF) and the transmembrane protein is the cystic fibrosis transmembrane regulator (CFTR).

Claim 17 (withdrawn): The method of claim 11, wherein the hepatic disease or condition is associated with the liver.

Claim 18 (withdrawn): The method of claim 17, wherein the disease or condition is α 1 anti-trypsin disease.

Claim 19 (withdrawn): The method of claim 11, wherein the nervous system disease or condition is associated with the brain.

Claim 20 (withdrawn): The method of claim 19, wherein the abnormal brain disease or condition is Alzheimer's disease or infection by a virus or prion.

Claim 21 (withdrawn): The method of claim 1, wherein the disease or condition is Marfan syndrome, familial hypercholesterolemia, or Tay-Sachs disease.

Claim 22 (original): The method of claim 1, wherein the compound is administered to the mammal by a stent, needle or in a solid dosage form.

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Claim 23 (previously presented): The method of claim 22, wherein the compound is administered to the mammal orally, intramuscularly or intraperitoneally.

Claim 24 (previously presented): A method for treating a mammal suffering from, susceptible to, or recovering from cystic fibrosis (CF), the method comprising administering to the mammal a therapeutically effective amount of at least one carbocyclic aryl compound comprising an unsaturated carbon chain and having spaced from the aryl ring a substituent of carboxy acid, ester, sulfonic acid, nitro, cyano or haloalkyl compound; or a pharmaceutically acceptable salt thereof.

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Claim 25 (previously presented): The method of claim 1 or 24, wherein the compound increases or decreases expression of a subject protein by at least about 10% in a standard *in vitro* assay for measuring the subject protein.

Claim 26 (original): The method of claim 25, wherein the subject protein is one or more of heat shock protein 70 (hsc70) or the cystic fibrosis transmembrane regulator (CFTR).

Claim 27 (original): The method of claim 26, wherein the compound is 4-phenyl- Δ^3 -transbutenoic acid, 4-phenyl- Δ^2 -transbutenoic acid; or a pharmaceutically acceptable salt thereof.

Claim 28 (original): The method of claim 27, wherein the pharmaceutically acceptable salt comprises 4-phenyl- Δ^3 -transbutenoate or 4-phenyl- Δ^2 -transbutenoate.

Claim 29 (previously presented): The method of claim 28, wherein the compound exhibits an IC_{50} of about 100 μ m or less in the assay

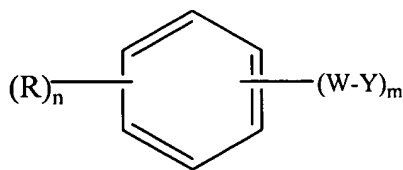
Claim 30 (original): The method of claim 29, wherein the compound is 4-phenyl- Δ^3 -transbutenoic acid, 4-phenyl- Δ^2 -transbutenoic acid; or a pharmaceutically acceptable salt thereof.

Claim 31 (original): The method of claim 30, wherein the pharmaceutically acceptable salt comprises 4-phenyl- Δ^3 -transbutenoate or 4-phenyl- Δ^2 -transbutenoate.

Claim 32 (original): The method of claim 1, wherein the mammal is a primate.

Claim 33 (original): The method of claim 32, wherein the primate is a human subject.

Claim 34 (previously presented): A method for treating a human subject suffering from, susceptible to, or recovering from a disease or condition associated with surfactant protein C; cystic fibrosis (CF) α_1 anti-trypsin disease, Alzheimer's disease, Marfan syndrome, familial hypercholesterolemia, or Tay-Sachs disease, the method comprising administering to the human subject a therapeutically effective amount of compound is of the following Formula I:



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wherein each W is independently optionally substituted alkylene; optionally substituted alkenylene; optionally substituted alkynylene; optionally substituted heteroalkylene; optionally substituted heteroalkenylene; or optionally substituted heteroalkynylene and further wherein W comprises an unsaturated straight carbon chain;

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each Y is independently a carboxy acid, ester, sulfonic acid, nitro, cyano or haloalkyl;

each R is independently halogen, cyano, nitro, optionally substituted alkyl; optionally substituted alkenyl; optionally substituted alkynyl; optionally substituted alkoxy; optionally substituted alkylthio; optionally substituted alkylsulfinyl; optionally substituted alkylsulfonyl; optionally substituted carbocyclic aryl; optionally substituted aralkyl;

m is an integer of from 1 to 6; n is an integer of from 0 to 5; and pharmaceutically acceptable salts thereof, with the exclusion of 4-phenylbutyric acid.

Claim 35 (withdrawn): A method for determining the therapeutic capacity of a compound for treating a disease or disorder modulated by protein expression, the method comprising,

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- 1) culturing a population of cells capable of expressing hsc70,
 - 2) adding at least one known or candidate compound to the cells;
 - 3) measuring at least one step capable of increasing or decreasing the protein

expression; and

- 4) determining the effect of the known or candidate compound on the expression of at least one subject protein.

Claim 36 (withdrawn): The method of claim 35, wherein the step measured by the method is at least transcription of the subject protein.

Claim 37 (withdrawn): The method of claim 35, wherein the step measured by the method is at least trafficking of the subject protein.

Claim 38 (withdrawn): The method of claim 37, wherein the measured step further comprises measuring levels of the subject protein immunologically.

Claim 39 (withdrawn): The method of claim 38, wherein the method further comprises an ELISA detection of the subject protein.

Claim 40 (withdrawn): The method of claim 1, wherein the compound is further administered to prevent the disease or condition.

Claim 41 (withdrawn): A kit for performing the method of claim 1, wherein the kit comprises a container means comprising at least one of the compounds.

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Claim 42 (previously presented): The method of claim 1 or 24, wherein the compound has an IC₅₀ of at least about 0.001 to about 10mM in a standard *in vitro* assay for measuring the subject protein

Claim 43 (previously presented): The method of claim 28, wherein the subject protein is one or more of heat shock protein 70 (hsc70).

Claim 44 (new): The method of claim 42, wherein the compound has an IC₅₀ of at least about 1 μM to about 10 μM.
